

AMENDMENTS TO THE CLAIMS

1. (previously presented) A method of forming an electrical connection between two devices, comprising:

bonding a completed interconnection on a first contact pad of a first component, wherein said completed interconnection comprises

a conductive polymer composition comprising a polymer component and an electrically conductive component; and,

a first solderable cap disposed in contact with said conductive polymer composition; and,

soldering said first solderable cap to a second contact pad of a second component.

2. (previously presented) The method of claim 1, wherein said polymer component comprises a thermoplastic polymer, a copolymer, or a blend, and said electrically conductive component comprises electrically conductive particles.

3. (original) The method of claim 2, wherein said polymer component comprises a nylon, polysulfone, polyester, polyimide, siloxane, ethylene, vinyl acetate, aryl-ether, polyutethane, polyisocyanate, polyether, polyester, acrylate, or polyvinyl chloride.

4. (previously presented) The method of claim 2 wherein said electrically conductive particles comprise gold, silver, palladium, oxide free noble alloys of gold, silver, and palladium, or a noble metal.

5. (original) The method of claim 1, wherein said first solderable cap comprises gold, nickel, silver, copper, zinc, palladium, platinum, indium, tin, bismuth, or lead.

6. (original) The method of claim 1, wherein said first solderable cap has a width and a thickness, and said width is about 0.010 inches to about 0.050 inches, and said thickness is about 0.002 inches to about 0.01 inches.

7. (previously presented) The method of claim 1, wherein said conductive polymer composition has a width and a thickness, and said width is about 0.010 inches to about 0.050 inches, and said thickness is about 0.002 inches to about 0.058 inches.

8. (previously presented) The method of claim 1, wherein said conductive polymer composition has a resistivity of less than about 0.05 ohms per centimeter.

9. (original) The method of claim 1, wherein said first solderable cap is a solder ball.

10. (previously presented) The method of claim 1 wherein said bonding comprises placing said interconnection in contact with said first contact pad and heating said conductive polymer composition.

11. (currently amended) The method of claim 1-20 wherein said bonding comprises:

applying said conductive polymer composition in an uncured state on said first contact pad;

disposing said first solderable cap in contact with said conductive polymer composition; and,

curing said conductive polymer composition.

12. (previously presented) The method of claim 1, further comprising:
soldering a second solderable cap of said completed interconnection to
said first contact pad of said first component, said second solderable cap disposed in

contact with said conductive polymer composition opposite said first solderable cap.

13. (previously presented) The method of claim 12, wherein said polymer component comprises a thermoplastic polymer, a copolymer, or a blend, and said electrically conductive component comprises electrically conductive particles.

14. (original) The method of claim 13, wherein said polymer component comprises:

a nylon, polysulfone, polyester, polyimide, siloxane, ethylene, vinyl acetate, aryl-ether, polyurethane, polyisocyanate, polyether, polyester, acrylate, or polyvinyl chloride.

15. (previously presented) The method of claim 13 wherein said electrically conductive particles comprise gold, silver, palladium, oxide free noble alloys of gold, silver, and palladium, or a noble metal.

16. (original) The method of claim 12, wherein said first solderable cap and said second solderable cap comprise gold, nickel, silver, copper, zinc, palladium, platinum, indium, tin, bismuth, or lead.

17. (original) The method of claim 12, wherein said first solderable cap and said second solderable cap have a width and a thickness, and said width is about 0.010 inches to about 0.050 inches, and said thickness is about 0.002 inches to about 0.01 inches.

18. (previously presented) The method of claim 12, wherein said conductive polymer composition has a width and a thickness, and said width is about 0.010 inches to about 0.050 inches, and said thickness is about 0.002 inches to about 0.058 inches.

19. (previously presented) The method of claim 12, wherein said conductive

polymer composition has a resistivity of less than about 0.05 ohms per centimeter.

20. (new) A method of forming an electrical connection between two devices, comprising:

bonding an interconnection on a first contact pad of a first component, wherein said interconnection comprises

a conductive polymer composition comprising a polymer component and an electrically conductive component; and,

a first solderable cap disposed in substantially planar contact with said conductive polymer composition; and,

soldering said first solderable cap to a second contact pad of a second component.